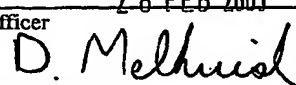


# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001652

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> Int. Cl. <sup>7</sup> : A61M 16/00 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI and keywords: apnea and control and mode and feedback and similar terms.		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5458137 A (AXE et al.) 17 October 1995 Column 4 lines 48 to 65	1,10,12, 13,22,24
X	US 5937853 A (STRÖM) 17 August 1999 Column 4 line 54 to column 5 line 9	25,37,49,56
A	US 5823187 A (ESTES et al.) 20 October 1998 Column 24 line 60 to column 25 line 17	
A	US 2003/0121519 A1 (ESTES et al.) 3 July 2003 Whole document	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "B" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family	
Date of the actual completion of the international search 22 February 2005		Date of mailing of the international search report 28 FEB 2005
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer  DAVID MELHUISH Telephone No : (02) 6283 2426

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001652

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0062044 A1 (BERTHON-JONES et al.) 3 April 2003 Whole document	
A	EP 788805 A2 (DeVILBISS HEALTH CARE, INC.) 13 August 1997 Whole document	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001652

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See additional sheet.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001652

### Supplemental Box

(To be used when the space in any of Boxes I to VIII is not sufficient)

#### Continuation of Box No: II

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

1. Claims 1 to 36 and 49 to 55 are directed to treating sleep disordered breathing using an inner control loop to provide treatment and an outer control loop to monitor the effectiveness of the treatment. It is considered that the use of inner and outer control loops comprises a first "special technical feature".
2. Claims 37 to 48 and 56 to 62 are directed to treating sleep disordered breathing using one of at least two treatment modes, and changing between the modes if necessary. It is considered that the use of two treatment modes comprises a "second special technical" feature.

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, a priori.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No. .

**PCT/AU2004/001652**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	5458137	AU	21892/92	AU	66296/94	CA	2111324
		CA	2159336	EP	0592492	EP	0699085
		US	5203343	US	6085747	WO	9222244
		WO	9423780				
US	5937853	EP	0774269	JP	9168595		
US	5823187	AU	14276/99	AU	29268/92	AU	30678/95
		AU	30679/95	AU	38508/93	AU	39130/95
		AU	62221/90	AU	98118/98	CA	2024477
		CA	2122590	CA	2162981	EP	0425092
		EP	0610405	EP	0714670	EP	1004325
		EP	1270036	JP	3222963	JP	8257016
		US	5148802	US	5239995	US	5313937
		US	5433193	US	5492113	US	5551418
		US	5632269	US	5803065	US	5901704
		US	5904141	US	5970975	US	6029664
		US	6305374	US	6427689	US	6539940
		US	6629527	US	2002023645	US	2003145856
		US	2004016433	WO	9308857		
US	2003121519	AU	30801/99	CA	2323455	EP	1061981
		US	5535738	US	5794615	US	6105575
		US	6609517	WO	9945989	WO	2004047621
US	2003062044	AU	12185/99	AU	91392/98	EP	1028769
		EP	1502618	NZ	504595	US	6367474
		US	6502572	US	6817361	WO	9924099
EP	0788805	NONE					
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							